

1 **INCREMENTAL DATA STORAGE**
2 **METHOD, APPARATUS, INTERFACE, AND SYSTEM**

3 **ABSTRACT OF THE INVENTION**

4 An interface for managing incremental data storage includes a write function that
5 appends an entry to an incremental log, a read function that retrieves a most recent log entry
6 corresponding to a block address, and a snapshot function that automatically partitions the
7 incremental log into an additional volume. The interface may also include a policy
8 assignment function that associates specified policies with explicitly or implicitly specified
9 resources, a read entry function that retrieves sequential entries from the incremental log, and
10 a compact volume function. The provided functions and associated apparatus, method, and
11 system, facilitate management of incremental data including snapshot, remote copy, data
12 compaction, policy management, data restoration, and other operations on data storage
13 devices and systems.